

Claims

1. Method of manufacturing a paper, characterised in that the paper is  
5 impregnated with an acrylate-containing dispersion or mixture.
2. Method according to Claim 1, characterised in that the acrylate-  
containing dispersion or mixture is pressed into the paper.
- 10 3. Method according to one of the foregoing claims, characterised in that  
the acrylate-containing dispersion or mixture contains water, in which  
acrylate particles are dispersed, and preferably resin, in particular an  
amino resin.
- 15 4. Method according to one of the foregoing claims, characterised in that  
colour pigments such as aluminium silicate, calcium carbonate,  $\text{TiO}_2$ ,  
 $\text{Al}_2\text{O}_3$  or magnesium silicate are added to the acrylate-containing mixture  
or dispersion.
- 20 5. Method according to one of the foregoing claims, characterised in that  
the paper is conducted through rollers which are pressed together, the  
acrylate-containing dispersion or mixture being continuously applied to at  
least one roller and preferably distributed on the roller with a doctor  
blade.
- 25 6. Method according to one of the foregoing claims, characterised in that  
the paper is de-aerated before the acrylate-containing dispersion or  
mixture is pressed into it and for this purpose in particular is steeped on  
one side in the acrylate-containing dispersion or mixture.

7. Method according to one of the foregoing claims, characterised in that the paper weight amounts to at least 15 grams per square metre and/or does not exceed an upper limit of 60 g/m<sup>2</sup>, preferably of 40 g/m<sup>2</sup>.
- 5 8. Method of manufacturing a tile, in which paper is impregnated in accordance with one of the foregoing claims and a laminate system which comprises the paper and a carrier plate is pressed with the application of heat.
- 10 9. Method of manufacturing a tile according to the preceding claim, in which the laminate system includes a decorated or patterned paper onto which a mixture of amino resin and abrasion-resistant particles is applied, preferably by spraying, before the pressing step.
- 15 10. Method of manufacturing a tile according to the preceding claim, in which fibres and/or spheres made of polyester, polyamide or glass are applied to the abrasion-resistant particles before the pressing step.
- 20 11. Paper characterised by acrylate which is present at least predominantly in the interior of the paper.
12. Paper according to the preceding article claim, produced in accordance with one of the foregoing method claims.
- 25 13. Paper according to one of the preceding article claims, characterised by a paper weight of 15 to 60 g/m<sup>2</sup>, preferably up to 40 g/m<sup>2</sup>.
14. Paper according to one of the preceding article claims, characterised by colour pigments which are present in the interior of the paper.

15. Paper according to one of the preceding article claims, characterised in that it displays no delamination on the conclusion of the performance of a standardised steam test, in which the paper is exposed to steam for two hours.

5

16. Tile, in which the paper according to one of the preceding article claims is used.

10 17. Tile according to the preceding claim, in which a surface of the tile is provided with abrasion-resistant particles such as corundum or silicon carbide particles and preferably with fibres and/or spheres made of polyester, polyamide or glass.

15 18. Tile according to one of the two preceding claims, characterised in that the tile is a flooring panel.